## Companies are betting big on autonomous vehicles but looming questions over chip supply and safety remain

**Article** 





Walmart last week reaffirmed its commitment to a driverless delivery ecosystem by investing in a recent funding round for San Francisco-based AV startup Crusie that raised \$2.75 billion, per CNBC. The investment comes five months after the two companies launched a pilot program using Cruise self-driving cars for deliveries in Scottsdale, Arizona, and marks Walmart's sixth partnership with an AV company.

Walmart is among several prominent companies that's made investments in driverless cars in recent weeks.

- Intel subsidiary Mobileye last week announced a partnership with AV startup Udelv to launch a fully driverless electric delivery service in the US by 2023.
- Around the same time, Cruise announced it would launch its first international robo-taxi service in Dubai sometime in 2023.
- Autonomous trucking startup TuSimple reportedly raised \$1.35 billion in an IPO late last week.
- Finally, Didi Chuxing this week announced that Volvo would provide the physical cars for its fleet of self-driving taxis.

Despite this growing interest, the ongoing global chip shortage may present significant roadblocks for near-term AV adoption. Semiconductor shortages arising from the pandemic have wreaked havoc on the auto industry, projected to cost automakers up to \$61 billion in lost revenues for 2021. These shortages will especially affect electric and autonomous vehicles, which require more sophisticated chips than more traditional vehicles. In the US, President Joe Biden has attempted to address the shortage by signing executive orders and proposing funding for domestic chip production, but these long-term solutions will offer little help for automakers in the short term

Additionally, high-profile AV crashes may incite calls for increased government safety regulation. A recent fatal crash reportedly involving a Tesla using its Autopilot mode, for instance, may reignite debates over consumer safety. For context, 48% of US internet users in 2020 said they either agreed or strongly agreed autonomous vehicles won't be safe, according to a 2020 Deloitte survey. Though AV proponents often point to statistics showing more than 90% of US car crashes result from "driver error," as a telling measure of AV's relative safety, skeptics claim it's still unclear how much safer driverless cars are than humans. US regulators remain divided over how strictly to regulate AVs, but continued crashes—especially those tragically resulting in deaths—may incite legislators to increase testing requirements and tap the brakes on AV adoption for now.



## Internet Users in Select Countries Who Agree that Autonomous Vehicles Will Not Be Safe, Oct 2019

% of respondents

| 7           |      |      |      |
|-------------|------|------|------|
|             | 2018 | 2019 | 2020 |
| India       | 47%  | 48%  | 58%  |
| US          | 47%  | 50%  | 48%  |
| Japan       | 57%  | 50%  | 47%  |
| South Korea | 54%  | 49%  | 46%  |
| Germany     | 45%  | 47%  | 45%  |
| China       | 26%  | 25%  | 35%  |

Note: ages 18+; "agree" or "strongly agree"
Source: Deloitte, "2020 Global Automotive Consumer Study," Jan 6, 2020
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